

EXHIBIT B
US 6,990,110 B2

13

translation connection using the changed virtual circuit identifier for the customer premises equipment; and when the number of changes of virtual circuit identifiers of the customer premises equipment have reached a predetermined number of changes terminating the translation connection.

17. The method of claim 16, further comprising validating the at least one virtual circuit identifier of the network element as defined by a valid permanent virtual circuit database.

18. The method of claim 16, further comprising validating the at least one virtual circuit identifier of the customer premises equipment as defined by a valid permanent virtual circuit database.

19. The method of claim 16, further comprising validating the changed virtual circuit identifier for the customer premises equipment as defined by a valid permanent virtual circuit database.

20. The method of claim 16, wherein receiving at least one virtual circuit identifier of the network element comprises receiving a message from an associated network containing the at least one virtual circuit identifier of the network element.

21. The method of claim 16, wherein learning at least one virtual circuit identifier of the customer premises equipment comprises receiving traffic from the customer premises equipment containing the at least one virtual circuit identifier of the customer premises equipment and storing the at least one virtual circuit identifier of the customer premises equipment.

22. A method of automatic permanent virtual circuit connection activation, the method comprising:

detecting initiation of communication between customer premises equipment and a network element at a first reference point;

receiving at least one virtual circuit identifier of the network element

learning at least one virtual circuit identifier of the customer premises equipment;

creating a translation connection between the customer premises equipment and the network element;

monitoring the first reference point and a second reference point, that is located on the network side of the network element, for activity;

when no activity is detected at the first or second reference points starting a timer; and

when the timer has reached a predetermined amount of time terminating the translation connection.

23. A method of automatically configuring a permanent virtual circuit in an ATM network, the method comprising: detecting communication initiation of an ATU-R; receiving at least one virtual circuit identifier of an ATU-C;

learning at least one virtual circuit identifier of the ATU-R;

creating a translation connection between the ATU-R and the ATU-C;

monitoring permanent virtual circuit created by the translation connection; and

when the at least one virtual circuit identifier for the ATU-R changes, recreating the translation connection using the changed virtual circuit identifier for the ATU-R; and

when the number of changes of at least one virtual circuit identifier of the ATU-R reaches a predetermined number of changes terminating the translation connection.

14

24. The method of claim 23, further comprising validating the at least one virtual circuit identifier of the ATU-R as defined by a valid permanent virtual circuit database.

25. The method of claim 23, wherein detecting communication initiation of an ATU-R comprises detecting communication initiation of an ATU-R at a first reference point.

26. The method of claim 23, further comprising validating the changed at least one virtual circuit identifier as defined by a valid permanent virtual circuit database.

27. The method of claim 23, wherein receiving at least one virtual circuit identifier of the ATU-C comprises receiving a message from an associated network containing die at least one virtual circuit identifier of the ATU-C.

28. The method of claim 23, wherein learning at least one virtual circuit identifier of the ATU-R comprises receiving traffic from the ATU-R containing the at least one virtual circuit identifier of the ATU-R and storing the at least one virtual circuit identifier of the ATU-R.

29. A method of automatically configuring a permanent virtual circuit in an ATM network, the method comprising: detecting communication initiation of an ATU-R; receiving at least one virtual circuit identifier of an ATU-C;

learning at least one virtual circuit identifier of the ATU-R;

creating a translation connection between the ATU-R and the ATU-C

wherein detecting communication initiation of an ATU-R comprises detecting communication initiation of an ATU-R at a first reference point;

monitoring the first reference point and a second reference point, that is located on the network side of the ATU-C, for activity;

when no activity is detected at the first or second reference points starting a timer; and

when the timer has reached a predetermined amount of time terminating the translation connection.

30. A communication network, comprising:

an access network;

a central unit selectively coupled to the access network; customer premises equipment selectively coupled to the central unit; and

an automatic permanent virtual circuit (PVC) connection activation function embedded within the central unit, wherein the automatic PVC is enabled when the customer premises equipment is initialized and is adapted to create a translation connection between the customer premises equipment and the central unit;

wherein the central unit learns at least one virtual circuit identifier of the customer premises equipment by receiving traffic from the customer premises equipment containing the at least one virtual circuit identifier of the customer premises equipment and stores the at least one virtual circuit identifier of the customer premises equipment.

31. The network of claim 30, further comprising a network interface between the customer premises equipment and the central unit.

32. The network of claim 30, wherein the customer premises equipment comprises an end user device selectively coupled to a remote unit.

33. A method of automatic permanent virtual circuit connection activation, the method comprising:

detecting initiation of communication at a user network interface between a first and a second network element;